What is claimed is:

1. A method of inhibiting the occurrence of advanced endometrium maturation in a human female subject undergoing fertility enhancing treatment comprising

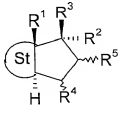
administering at least one 17α-fluoralkylated progesterone receptor antagonist to the female subject during the post-ovulatory phase of the endometrial cycle.

2. A method according to claim 1, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered to the subject in a daily dosage amount of 0.1-2 mg per subject.

3. A method according to claim 2, wherein the fertility treatment comprises the administration to the subject of a follicle stimulating agent comprising follicle stimulating hormone.

4. A method according to claim 2, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered in an amount of 0.1-2 mg per subject on a single day during the post-ovulatory phase of the endometrial cycle.

5. A method according to claim 2, wherein the 17α-fluoralkylated progesterone receptor antagonist is a compound of formula I:



I

wherein

R^1 is methyl or ethyl,

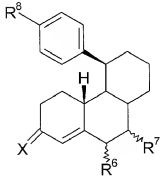
R^2 is $C_nF_mH_o$, wherein n is 1-6, preferably 2, 3, 4, 5 or 6, m > 1 and

$m+o = 2n+1$,

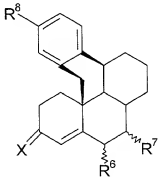
R^3 is a free, etherified or esterified hydroxy group,

R^4 and R^5 each is a hydrogen, or together form an additional bond or a methylene group,

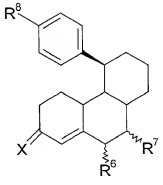
St is a steroidal ABC-ring system of partial formula A, B or C



A



B



C

wherein

R^6 is hydrogen, a straight-chain C_1-C_4 alkyl group or branched C_3-C_4 alkyl group or halogen,

R^7 is hydrogen, a straight-chain C_1-C_4 alkyl group or a branched C_3-C_4 alkyl group, or

if St is a steroidal ABC-ring system A or B, in addition

R^6 and R^7 together can form an additional bond,

X is oxygen, hydroxyimino (=N-OH) or two hydrogen atoms,

R^8 is Y or aryl that is optionally substituted in several places with a group Y, other than H,

Y is hydrogen, halogen, -OH, $-NO_2$, $-N_3$, -CN, $-NR^{9a}R^{9b}$, $-NHSO_2R^9$, $-CO_2R^9$, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, C_1-C_{10} alkanoyloxy, benzoyloxy, C_1-C_{10} alkanoyl, C_1-C_{10} hydroxyalkyl or benzoyl,

R^{9a} and R^{9b} are the same or different and each is hydrogen or C_1-C_{10} alkyl,

R^9 is hydrogen or C_1-C_{10} alkyl,

and for $-NR^{9a}R^{9b}$ radicals, as well as their physiologically compatible salts with acids and for $-CO_2R^9$ radicals with R^9 being hydrogen, as well as their physiologically compatible salts with bases.

6. A method according to claim 4, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered orally to the subject.

7. A method of achieving pregnancy in a human female subject comprising

stimulating the ovaries of the subject by administering a follicle stimulating agent to the subject, wherein the agent comprises follicle stimulating hormone;

removing eggs from the ovary of the stimulated subject;

administering at least one 17α-fluoralkylated progesterone receptor antagonist to the subject in the post-ovulatory phase of the endometrial cycle;

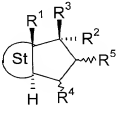
fertilizing at least one egg in vitro to obtain an embryo;

transferring the embryo into the uterus or fallopian tubes of the mammal.

8. A method according to claim 7, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered to the subject in a daily dosage amount of 0.1-10 mg per subject

9. A method according to claim 8, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered in an amount of 0.1-2 mg per subject on a single day during the post-ovulatory phase of the endometrial cycle.

10. A method according to claim 8, wherein the 17α-fluoralkylated progesterone receptor antagonist is a compound of formula I:



I

wherein

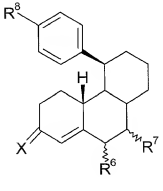
R^1 is methyl or ethyl,

R^2 is $C_nF_mH_o$, wherein n is 1-6, preferably 2, 3, 4, 5 or 6, $m > 1$ and $m+o = 2n+1$,

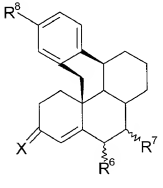
R^3 is a free, etherified or esterified hydroxy group,

R^4 and R^5 each is a hydrogen, or together form an additional bond or a methylene group,

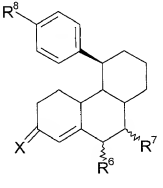
St is a steroidal ABC-ring system of partial formula A, B or C



A



B



C

wherein

R^6 is hydrogen, a straight-chain C_1-C_4 alkyl group or branched C_3-C_4 alkyl group or halogen,

R^7 is hydrogen, a straight-chain C_1-C_4 alkyl group or a branched C_3-C_4 alkyl group, or

if St is a steroidal ABC-ring system A or B, in addition

R^6 and R^7 together can form an additional bond,

X is oxygen, hydroxyimino (=N-OH) or two hydrogen atoms,

R^8 is Y or aryl that is optionally substituted in several places with a group Y, other than H,

Y is hydrogen, halogen, -OH, $-NO_2$, $-N_3$, -CN, $-NR^{9a}R^{9b}$, $-NHSO_2R^9$, $-CO_2R^9$, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, C_1-C_{10} alkanoyloxy, benzoyloxy, C_1-C_{10} alkanoyl, C_1-C_{10} hydroxyalkyl or benzoyl,

R^{9a} and R^{9b} are the same or different and each is hydrogen or C_1-C_{10} alkyl,

R^9 is hydrogen or C_1-C_{10} alkyl,

and for $-NR^{9a}R^{9b}$ radicals, as well as their physiologically compatible salts with acids and for $-CO_2R^9$ radicals with R^9 being hydrogen, as well as their physiologically compatible salts with bases.

11. A method according to claim 9, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered orally to the subject.

12. A method of inhibiting the occurrence of advanced endometrium maturation in a non-human female mammal undergoing fertility enhancement treatment to achieve pregnancy comprising

administering at least one 17α-fluoralkylated progesterone receptor antagonist to the mammal during the post-ovulatory phase of the endometrial cycle.

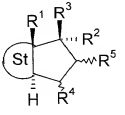
13. A method according to claim 12, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered to the mammal in a daily dosage amount of 0.01-1 mg/kg.

14. A method according to claim 13, wherein the fertility treatment comprises the administration to the mammal of a follicle stimulating agent comprising follicle stimulating hormone.

15. A method according to claim 13, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered to the mammal in an amount of

0.1-1 mg/kg on a single day during the post-ovulatory phase of the endometrial cycle.

16. A method according to claim 13, wherein the 17α-fluoralkylated progesterone receptor antagonist is a compound of formula I:



I

wherein

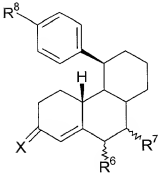
R^1 is methyl or ethyl,

R^2 is $C_nF_mH_o$, wherein n is 1-6, preferably 2, 3, 4, 5 or 6, m > 1 and m+o = 2n+1,

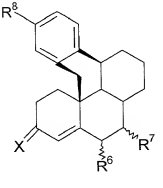
R^3 is a free, etherified or esterified hydroxy group,

R^4 and R^5 each is a hydrogen, or together form an additional bond or a methylene group,

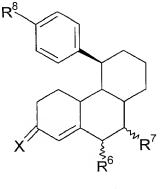
St is a steroidal ABC-ring system of partial formula A, B or C



A



B



C

wherein

R^6 is hydrogen, a straight-chain C_1-C_4 alkyl group or branched C_3-C_4 alkyl group or halogen,

R^7 is hydrogen, a straight-chain C_1-C_4 alkyl group or a branched C_3-C_4 alkyl group, or

if St is a steroidal ABC-ring system A or B, in addition

R^6 and R^7 together can form an additional bond,

X is oxygen, hydroxyimino (=N-OH) or two hydrogen atoms,

R^8 is Y or aryl that is optionally substituted in several places with a group Y, other than H,

Y is hydrogen, halogen, -OH, $-NO_2$, $-N_3$, -CN, $-NR^{9a}R^{9b}$, $-NHSO_2R^9$, $-CO_2R^9$, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, C_1-C_{10} alkanoyloxy, benzoyloxy, C_1-C_{10} alkanoyl, C_1-C_{10} hydroxyalkyl or benzoyl,

R^{9a} and R^{9b} are the same or different and each is hydrogen or C_1-C_{10} alkyl,

R^9 is hydrogen or C_1-C_{10} alkyl,

and for $-NR^{9a}R^{9b}$ radicals, as well as their physiologically compatible salts with acids and for $-CO_2R^9$ radicals with R^9 being hydrogen, as well as their physiologically compatible salts with bases.

17. A method of achieving pregnancy in a non-human mammal comprising

stimulating the ovaries of the mammal by administering a follicle stimulating agent to the mammal, wherein the agent comprises follicle stimulating hormone;

removing eggs from the ovary of the stimulated mammal;

administering at least one 17α-fluoralkylated progesterone receptor antagonist to the mammal in the post-ovulatory phase of the endometrial cycle;

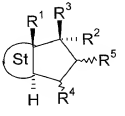
fertilizing at least one egg in vitro to obtain an embryo;

transferring the embryo into the uterus or fallopian tubes of the mammal.

18. A method according to claim 17, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered to the mammal in a daily dosage amount of 0.01-1 mg/kg.

19. A method according to claim 18, wherein the 17α-fluoralkylated progesterone receptor antagonist is administered to the mammal in an amount 0.1-1 mg/kg on a single day during the post-ovulatory phase of the endometrial cycle.

20. A method according to claim 18, wherein the 17α-fluoralkylated progesterone receptor antagonist is a compound of formula I:



I

wherein

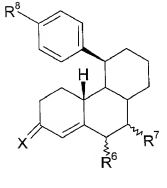
R^1 is methyl or ethyl,

R^2 is $C_nF_mH_o$, wherein n is 1-6, preferably 2, 3, 4, 5 or 6, $m > 1$ and $m+o = 2n+1$,

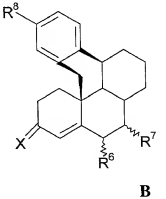
R^3 is a free, etherified or esterified hydroxy group,

R^4 and R^5 each is a hydrogen, or together form an additional bond or a methylene group,

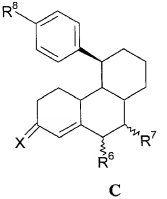
St is a steroidal ABC-ring system of partial formula A, B or C



A



B



C

wherein

R^6 is hydrogen, a straight-chain C_1-C_4 alkyl group or branched C_3-C_4 alkyl group or halogen,

R^7 is hydrogen, a straight-chain C_1-C_4 alkyl group or a branched C_3-C_4 alkyl group, or

if St is a steroidal ABC-ring system A or B, in addition

R^6 and R^7 together can form an additional bond,

X is oxygen, hydroxyimino (=N-OH) or two hydrogen atoms,

R^8 is Y or aryl that is optionally substituted in several places with a group Y, other than H,

Y is hydrogen, halogen, -OH, $-NO_2$, $-N_3$, -CN, $-NR^{9a}R^{9b}$, $-NHSO_2R^9$, $-CO_2R^9$, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, C_1-C_{10} alkanoyloxy, benzoyloxy, C_1-C_{10} alkanoyl, C_1-C_{10} hydroxyalkyl or benzoyl,

R^{9a} and R^{9b} are the same or different and each is hydrogen or C_1-C_{10} alkyl,

R^9 is hydrogen or C_1-C_{10} alkyl,

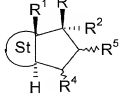
and for $-NR^{9a}R^{9b}$ radicals, as well as their physiologically compatible salts with acids and for $-CO_2R^9$ radicals with R^9 being hydrogen, as well as their physiologically compatible salts with bases.

21. A non-human mammal which results from a pregnancy achieved by a process according to claim 13.

22. A non-human mammal which results from a pregnancy achieved by a process according to claim 18.

23. A method of inhibiting the occurrence of advanced endometrium maturation in a human female subject undergoing fertility enhancing treatment comprising

administering at least one compound of formula I to the subject, wherein formula I is



I

wherein

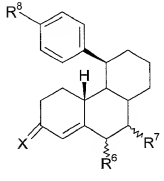
R^1 is methyl or ethyl,

R^2 is $C_nF_mH_o$, wherein n is 1-6, preferably 2, 3, 4, 5 or 6, $m > 1$ and $m+o = 2n+1$,

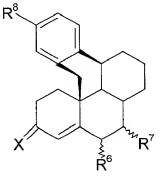
R^3 is a free, etherified or esterified hydroxy group,

R^4 and R^5 each is a hydrogen, or together form an additional bond or a methylene group,

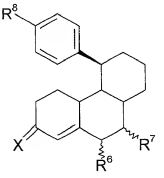
St is a steroidal ABC-ring system of partial formula A, B or C



A



B



C

wherein

R^6 is hydrogen, a straight-chain C_1-C_4 alkyl group or branched C_3-C_4 alkyl group or halogen,

R^7 is hydrogen, a straight-chain C_1-C_4 alkyl group or a branched C_3-C_4 alkyl group, or

if St is a steroidal ABC-ring system A or B, in addition

R^6 and R^7 together can form an additional bond,

X is oxygen, hydroxyimino (=N-OH) or two hydrogen atoms,

R^8 is Y or aryl that is optionally substituted in several places with a group Y, other than H,

Y is hydrogen, halogen, -OH, $-NO_2$, $-N_3$, -CN, $-NR^{9a}R^{9b}$, $-NHSO_2R^9$, $-CO_2R^9$, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, C_1-C_{10} alkanoyloxy, benzoyloxy, C_1-C_{10} alkanoyl, C_1-C_{10} hydroxyalkyl or benzoyl,

R^{9a} and R^{9b} are the same or different and each is hydrogen or C_1-C_{10} alkyl,

R^9 is hydrogen or C_1-C_{10} alkyl,

and for $-NR^{9a}R^{9b}$ radicals, as well as their physiologically compatible salts with acids and for $-CO_2R^9$ radicals with R^9 being hydrogen, as well as their physiologically compatible salts with bases.

24. A method of achieving pregnancy in a human female subject comprising

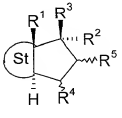
stimulating the ovaries of the subject by administering a follicle stimulating agent to the subject, wherein the agent comprises follicle stimulating hormone;

removing eggs from the ovary of the stimulated subject;

administering at least one compound of formula I to the subject in the post-ovulatory phase of the endometrial cycle;

fertilizing at least one egg in vitro to obtain an embryo;

transferring the embryo into the uterus or fallopian tubes of the mammal, wherein formula I is



I

wherein

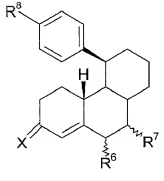
R^1 is methyl or ethyl,

R^2 is $C_nF_mH_o$, wherein n is 1-6, preferably 2, 3, 4, 5 or 6, m > 1 and m+o = 2n+1,

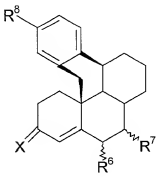
R^3 is a free, etherified or esterified hydroxy group,

R^4 and R^5 each is a hydrogen, or together form an additional bond or a methylene group,

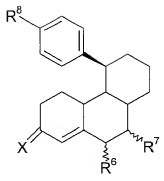
St is a steroidal ABC-ring system of partial formula A, B or C



A



B



C

wherein

R^6 is hydrogen, a straight-chain C_1-C_4 alkyl group or branched C_3-C_4 alkyl group or halogen,

R^7 is hydrogen, a straight-chain C_1-C_4 alkyl group or a branched C_3-C_4 alkyl group, or

if St is a steroidal ABC-ring system A or B, in addition

R^6 and R^7 together can form an additional bond,

X is oxygen, hydroxyimino (=N-OH) or two hydrogen atoms,

R^8 is Y or aryl that is optionally substituted in several places with a group Y, other than H,

Y is hydrogen, halogen, -OH, $-NO_2$, $-N_3$, -CN, $-NR^{9a}R^{9b}$, $-NHSO_2R^9$, $-CO_2R^9$, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, C_1-C_{10} alkanoyloxy, benzoyloxy, C_1-C_{10} alkanoyl, C_1-C_{10} hydroxyalkyl or benzoyl,

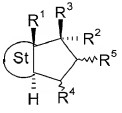
R^{9a} and R^{9b} are the same or different and each is hydrogen or C_1-C_{10} alkyl,

R^9 is hydrogen or C_1-C_{10} alkyl,

and for $-NR^{9a}R^{9b}$ radicals, as well as their physiologically compatible salts with acids and for $-CO_2R^9$ radicals with R^9 being hydrogen, as well as their physiologically compatible salts with bases.

25. A method of inhibiting the occurrence of advanced endometrium maturation in a non-human female mammal undergoing fertility enhancement treatment to achieve pregnancy comprising

administering at least one compound according to formula I to the mammal, wherein formula I is



I

wherein

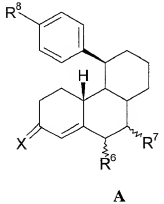
R^1 is methyl or ethyl,

R^2 is $C_nF_mH_o$, wherein n is 1-6, preferably 2, 3, 4, 5 or 6, $m > 1$ and $m+o = 2n+1$,

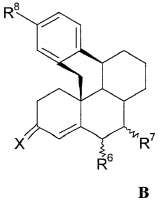
R^3 is a free, etherified or esterified hydroxy group,

R^4 and R^5 each is a hydrogen, or together form an additional bond or a methylene group,

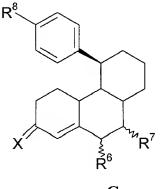
St is a steroidal ABC-ring system of partial formula A, B or C



A



B



C

wherein

R^6 is hydrogen, a straight-chain C_1-C_4 alkyl group or branched C_3-C_4 alkyl group or halogen,

R^7 is hydrogen, a straight-chain C_1-C_4 alkyl group or a branched C_3-C_4 alkyl group, or

if St is a steroidal ABC-ring system A or B, in addition

R^6 and R^7 together can form an additional bond,

X is oxygen, hydroxyimino (=N-OH) or two hydrogen atoms,

R^8 is Y or aryl that is optionally substituted in several places with a group Y, other than H,

Y is hydrogen, halogen, -OH, $-NO_2$, $-N_3$, -CN, $-NR^{9a}R^{9b}$, $-NHSO_2R^9$, $-CO_2R^9$, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, C_1-C_{10} alkanoyloxy, benzoyloxy, C_1-C_{10} alkanoyl, C_1-C_{10} hydroxyalkyl or benzoyl,

R^{9a} and R^{9b} are the same or different and each is hydrogen or C_1-C_{10} alkyl,

R^9 is hydrogen or C_1-C_{10} alkyl,

and for $-NR^{9a}R^{9b}$ radicals, as well as their physiologically compatible salts with acids and for $-CO_2R^9$ radicals with R^9 being hydrogen, as well as their physiologically compatible salts with bases.

26. A method of achieving pregnancy in a non-human mammal comprising

stimulating the ovaries of the mammal by administering a follicle stimulating agent to the mammal, wherein the agent comprises follicle stimulating hormone;

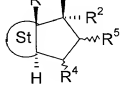
removing eggs from the ovary of the stimulated mammal;

administering at least one compound of formula I to the mammal in the post-ovulatory phase of the endometrial cycle;

fertilizing at least one egg in vitro to obtain an embryo;

transferring the embryo into the uterus or fallopian tubes of the mammal,

wherein formula I is



I

wherein

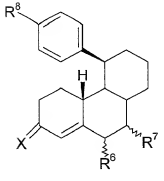
R^1 is methyl or ethyl,

R^2 is $C_nF_mH_o$, wherein n is 1-6, preferably 2, 3, 4, 5 or 6, m > 1 and m+o = 2n+1,

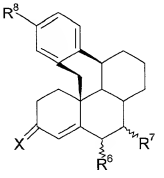
R^3 is a free, etherified or esterified hydroxy group,

R^4 and R^5 each is a hydrogen, or together form an additional bond or a methylene group,

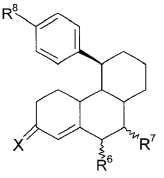
St is a steroidal ABC-ring system of partial formula A, B or C



A



B



C

wherein

R^6 is hydrogen, a straight-chain C_1-C_4 alkyl group or branched C_3-C_4 alkyl group or halogen,

R^7 is hydrogen, a straight-chain C_1-C_4 alkyl group or a branched C_3-C_4 alkyl group, or

if St is a steroidal ABC-ring system A or B, in addition

R^6 and R^7 together can form an additional bond,

X is oxygen, hydroxyimino (=N-OH) or two hydrogen atoms,

R^8 is Y or aryl that is optionally substituted in several places with a group Y, other than H,

Y is hydrogen, halogen, -OH, $-NO_2$, $-N_3$, -CN, $-NR^{9a}R^{9b}$, $-NHSO_2R^9$, $-CO_2R^9$, C_1-C_{10} alkyl, C_1-C_{10} alkoxy, C_1-C_{10} alkanoyloxy, benzoyloxy, C_1-C_{10} alkanoyl, C_1-C_{10} hydroxyalkyl or benzoyl,

R^{9a} and R^{9b} are the same or different and each is hydrogen or C_1-C_{10} alkyl,

R^9 is hydrogen or C_1-C_{10} alkyl,

and for $-NR^{9a}R^{9b}$ radicals, as well as their physiologically compatible salts with acids and for $-CO_2R^9$ radicals with R^9 being hydrogen, as well as their physiologically compatible salts with bases.

27. A method of inhibiting the occurrence of advanced endometrium maturation in a human female subject undergoing fertility enhancing treatment comprising

administering at least one 17α-fluoralkylated progesterone receptor antagonist to the female subject during the post-ovulatory phase of the endometrial cycle.

28. A method of inhibiting the occurrence of advanced endometrium maturation in a human female subject undergoing fertility enhancing treatment comprising

administering at least one 17α-fluoralkylated progesterone receptor antagonist to the female subject during the post-ovulatory phase of the endometrial cycle after said fertility enhancing treatment.

29. A method of inhibiting the occurrence of advanced endometrium maturation in a non-human female mammal undergoing fertility enhancement treatment to achieve pregnancy comprising

administering at least one 17α-fluoralkylated progesterone receptor antagonist to the mammal during the post-ovulatory phase of the endometrial cycle after said fertility enhancing treatment.